Application No. 10/695,680 Filed: October 29, 2003

Amendments to the Claims:

This listing of the claims replaces all prior versions of the claims in the application:

Listing of the Claims:

- 1. (Currently Amended) A method of alleviating back pain in a mammal, comprising contacting a neuronal cell of a cartilaginous tissue with an antagonist of a glutamate receptor, wherein said cartilaginous tissue comprises degenerating cartilage, wherein inhibition of binding of free glutamate liberated from said degenerating cartilage to said glutamate receptor on said neuronal cell alleviates said back pain, and wherein said glutamate receptor antagonist is administered directly into intervertebral disc tissue to inhibit binding of said free glutamate to said glutamate receptors on said disc tissue, and wherein glutamate receptor antagonist comprises a KA receptor antagonist, a NMDA receptor antagonist, or an AMPA receptor antagonist.
- 2. (Original) The method of claim 1, wherein said glutamate receptor is an ionotropic glutamate receptor.
- 3. (Original) The method of claim 2, wherein said ionotropic glutamate receptor antagonist is a non-N-methyl-D-aspartate (NMDA) type receptor antagonist.
- 4. (Original) The method of claim 2, wherein said non-NMDA receptor antagonist is chosen from the group consisting of a (S)-a-amino-3-hydroxy-5-methyl-4-isoxalone propionate (AMPA) receptor antagonist and a kainate-activated (KA) receptor antagonist.
- 5. (Original) The method of claim 1, wherein said antagonist is an NMDA receptor antagonist.
- 6. (Original) The method of claim 5, wherein said NMDA receptor antagonist is MK-801.
- 7. (Original) The method of claim 4, wherein said AMPA receptor antagonist is selected from the group consisting of GYK152466, CNQX, and NBQX.
- 8. (Original) The method of claim 4, wherein said KA receptor antagonist is selected from the group consisting of LY294486, LY382884 and ACEA-1011.

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- 9. (Currently Amended) The method of claim 1, wherein said glutamate receptor is <u>further</u> comprises metabotropic glutamate receptor <u>antagonist</u>.
- 10. (Currently Amended) The method of claim 1, wherein said antagonist is further comprises a metabotropic glutamate receptor antagonist selected from the group consisting of L(+)-2-amino-3-phosphonoproprionic acid (L-AP3) and (S)4-carboxy, 3-hydroxyphenyl glycine (CHPG).
- 11. (Original) The method of claim 1, wherein said antagonist preferentially inhibits binding of free glutamate to a mGlu2 receptor.
- 12. (Cancelled)
- 13. (Original) The method of claim 1, wherein said neuronal cell is a dorsal root ganglion cell.
- 14. 20. (Cancelled)
- 21. (Previously Presented) The method of claim 1, wherein said cartilaginous tissue is herniated intervertebral disc tissue comprising a tear in a disc annulus, and wherein said antagonist is administered directly to said herniated disc tissue to contact said glutamate receptor located in said disc annulus.
- 22. (Canceled)